These questions were compiled by the FPA Project Core Team during the course of the requirements analysis. The Priority Scale is defined as follows: Critical questions must be answered during the requirements analysis phase; Non-critical questions can be answered in a future phase of the project.

Row No.	Priority	Subject Area	Requirements Analysis Question	Resolution	Status
1.	Critical	Costs	Will the cost of making capital expenditures, such as physical structures (buildings, facilities) or new equipment, be included in the analysis? Where will these costs appear in relationship to the cost effective frontier.	Yes. This requires some economic analysis to determine how the costs are amortized over time and what cost is included in the budget.	Open
2.	Critical	Costs	How will personnel costs be added during optimization to determine the deployment costs of a resource? Assumption: Fire resource personnel are fully budgeted out of preparedness for all budgeted resources.		Open
3.	Non-critical	Costs	Will the SuD record false alarms and natural outs with an associated standard deployment cost? Are these fires valued differently?		Open
4.	Critical	Fire History	Will the SuD use actual fire history events or average or representative fire events as part of the analysis?	The preference is to use actual fire history events and work with the Missoula Fire Lab to clarify the impact and determine the implementation.	Open
5.	Critical	Fire History	What is the standard period for fire history?		Open

Row No.	Priority	Subject Area	Requirements Analysis Question	Resolution	Status
6.	Critical	Fire Resources	What will we use for the standard configuration of fire resources beyond the NWCG minimum? For example, the NWCG standard is two crew for a type six engine and the agencies now use three crew for a type six engine.	The SuD will use NWCG minimums and will replicate crews as part of the optimization model.	Open
7.	Critical	Fire Resources	How is ownership defined for replicated resources?	The SuD will apply ownership based on the dispatch location from where the replicated resource is deployed. Where the dispatch location ownership is shared, as part of the post processing analysis, the Local Agency Fire Planner(s) will determine ownership.	Open
8.	Critical	Fire Simulation	Will the model address multiple fire starts in this release of the software? This depends on the definition of multiple fire starts.	Yes. The definition of multiple fires is not resolved. If we use every ignition or a percentage of ignitions to replicate the fire episode, and if a fire is contained within a time period and the SuD can send available resource, the optimization model should send the fire resources.	Open
9.	Critical	FMU	What is the definition of FMU Type and how will it be used by the model.		Open
10.	Critical	FMU Objectives	How will the model use FMU weights?		Open
11.	Critical	FMU Objectives	How will FILs be reflected in the assignment of weighting?		Open

Row No.	Priority	Subject Area	Requirements Analysis Question	Resolution	Status
12.	Critical	FMU Objectives	How do we structure the process of assigning weights for management objectives so that it facilitates user input?		Open
13.	Non Critical	FMU Objectives	What are the interagency policies and procedures for establishing FMU weights?		Open
14.	Non-critical	FMU Objectives	How do we translate FMP goals and objectives into the necessary inputs for the SuD?		Open
15.	Critical	Optimization	Is effectiveness defined as protecting the most acres? or meeting objectives? or another measure as yet undefined? How do we measure progress toward objectives relative to the measure of effectiveness and budget level? The optimization model could be constrained to meet less than or equal to the objective. Or there would be no gain in effectiveness by exceeding a target.		Open
16.	Critical	Optimization	What is the most efficient way to simulate line production, rate of spread and fire intensity level for input to the optimization model?		Open
17.	Non-critical	Reporting	How will budgets roll up to regional and national levels, and how is it described?		Open
18.	Critical	Costs	Will predictive services (fire behavior and weather) be excluded from the analysis?	Predictive services will be included only as required for the IA Analysis, not as a separate analysis element.	Closed

Row No.	Priority	Subject Area	Requirements Analysis Question	Resolution	Status
19.	Critical	Costs	What happens to restoration costs between USFS and DOI? Are they charged to emergency suppression?	Restoration costs are not included in emergency suppression. A process for separating restoration costs out for DOI will be addressed	Closed
20.	Non-critical	Costs	Where will we get acceptable suppression costs for average fire suppression costs?	Local Agency Admin/Budget Staff will define these costs using standard accounting rules defined by the FPA PM project and approved by the FFALC Budget Committee.	Closed
21.	Non-critical	Costs	Will the alternative budgets include the escaped fire costs?	Escaped fire costs are included in the total costs but not in the preparedness budget.	Closed
22.	Non-critical	Costs	How will the SuD calculate the cost of suppression for fires that are less than $1/10^{th}$ of an acre?	The SuD will able to use a minimum fire size of 1/100 of an acre and calculate costs accordingly. Policy recommendation: Fires are reported at 1/100 of an acre.	Closed
23.	Critical	Fire History	What are the minimum required data elements to document a fire event for the FPA System, including the standard method of collecting the data?	SuD will use standard fire report data as contained in PCHA.	Closed
24.	Critical	Fire History	If the SuD uses actual fire event data as fire history, is it possible to use actual fire cost data from Agency financial systems?	Yes.	Closed
25.	Critical	Fire History	Is the definition of fire regime (per Bunnell and Hahn) acceptable to all agencies?	Assumption is that this definition is acceptable to all Agencies and will help to determine fuel conditions for the FMU.	Closed
26.	Critical	Fire History	What fire behavior model will the SuD use? The answer will dictate the attributes required. What is the standard data used?	The SuD will use Fire Behavior Prediction System (Used by BEHAVE).	Closed

Row No.	Priority	Subject Area	Requirements Analysis Question	Resolution	Status
27.	Critical	Fire History	Will we eliminate or streamline the calibration process (as used in IIAA) for the Fire Behavior Simulator	The calibration process will be streamlined by the SuD.	Closed
28.	Critical	Fire History	What is the current data definition for the input and output from PCHA. Fuels, slope, aspect and access feeds into PCHA. Is the output the number of fires?	An application similar to PCHA or Fire Family Plus will be developed to use a wider range for the ROS.	Closed
29.	Critical	Fire History	If we use weather stations other than NFDRS, will the SuD be able to adjust weather over time and elevation as part of fire behavior simulation? (Fire behavior prediction adjusters include: Month, Aspect, exposure, time, elevation, above/below)	The SuD will contain this functionality as part of the fire simulator.	Closed
30.	Non-critical	Fire History	Do we need to get weather observations closer to the time and location of a fire start, or just continue to use the WIMS data? We should explore alternatives to WIMS such as city data, RAWS, NFDRS, NOAA, etc. (IIAA uses WIMS-RAWS.) Note: It would be best to get weather data as close as possible to the time and location of the fire start.	FPA will define the required weather data standard (NFDRS) and allow the user to define the best source for this data.	Closed

Row No.	Priority	Subject Area	Requirements Analysis Question	Resolution	Status
31.	Critical	Fire Resources	What method will the SuD use to compute travel time by the fire resource from the dispatch location to the FMU travel point? Will it use a constant travel speed or contain more detail?	If GIS data is available, the travel time from the resource to the fire could be computed based on the road location and conditions such as slope, etc. The SuD will contain a distance and a speed for a resource and compute the time required to travel from the dispatch location to a centroid point within the FMU (as in IIAA).	Closed
32.	Critical	Fire Resources	Should an individual resource be identified in a way that relates to the actual fire resource; for example, engine 7133?	Yes, by importing fire resource data from ROSS this information is available.	Closed
33.	Critical	Fire Resources	If fire resource data is imported to the SuD from ROSS, will we use the NWCG standard production rates and personnel configurations?	Yes.	Closed
34.	Critical	Fire Simulation	Should we exclude the escaped fire table from the model and handle this through a perimeter growth containment model?	No.	Closed
35.	Critical	Fire Simulation	User will establish a fire size threshold and at that point the model could use the escaped fire table. This would differ by FMU or fuel type. Issue: Rules are needed.	The standard is 48 hours or 300 acres as a fire size threshold as set by 10 Year Comprehensive Strategy.	Closed
36.	Critical	FMU	How are FMUs defined?	We will use the definition for FMU from the fire management plan template.	Closed

Row No.	Priority	Subject Area	Requirements Analysis Question	Resolution	Status
37.	Non-Critical	FMU	Can the Local Agency Fire Planner define FMUs and objectives for their Agency independent of other Agencies?	Yes, if the FMU is solely owned by their Agency. If the FMU is shared, then the Agencies must collaborate.	Closed
38.	Non-critical	FMU	Will polygon designators of ABCD be used by all agencies?	This designator is not required.	Closed
39.	Critical	FMU Objectives	Is the FMU objective a measure by incident or annually?	Must be annually.	Closed
40.	Critical	FMU Objectives	Can FMU objectives be categorized qualitatively, to allow tracking back to the FMP, LMP?	The SuD will contain a way to track back to the FMP and LMP, or default policy.	Closed
41.	Critical	FMU Objectives	How will the model use time of year when included in the FMU objectives, e.g. seasons, phenologic stage, etc.	If the fire history data is temporal, then the SuD will contain time of year. The SuD may require multiple objectives based on time of year.	Closed
42.	Critical	FMU Objectives	Can we develop a set of default FMU objectives? Example: Manage for late successional reserve relates to minimizing a specific number of acres burned.	The SuD will contain a optional set of predefined LMP objectives to relate to FMU objectives.	Closed
43.	Critical	FMU Objectives	Will there be objectives that are not related to fire management objectives?	No. Resource objectives will be translated into fire management objectives.	Closed
44.	Critical	FMU Objectives	Policy question: Do the objectives apply to only those fires that exceed initial attack?	No. Objectives may apply to all ignitions.	Closed
45.	Non-critical	FPU	What defines the fire planning unit on the ground?	Move this question to the implementation phase.	Closed

Row No.	Priority	Subject Area	Requirements Analysis Question	Resolution	Status
46.	Critical	Post-Optimization	There is no standard definition of costs for personnel, program leadership, support and administration across the five FPA agencies.	Rule based planning and threshold levels will be part of the SuD.	Closed
47.	Critical	Post-Optimization	There are different definitions for support costs within the five FPA agencies.	Rule based planning and threshold levels will be part of the SuD. Note: Agencies are constrained to these definitions for planning but not for implementation.	Closed
48.	Critical	Post-Optimization	Do we add rule-based management and overhead costs after the optimum suppression organizations are created by the model, or is it factored in as part of the master resources that are input to the model, or a little of both?	See FPA01-06 Post-Optimization Analysis.	Closed

No.	**Priority**	**FFALC Budget Committee Question**	**Resolution**	**Status**
1.	Critical	There is variance by agency and even by units, as to what is included in the preparedness, emergency suppression and stabilization costs. The calculation elements and formula should be standardized across agencies and units. Can this be done through a statistical sample rather than by making changes to accounting methodology?	Ask the Interagency fire management business group to develop this and evaluate the result.	Open
2.	Critical	How should the SuD account for non-producer costs (e.g., FMOs, computers, office support)? Options include: 1) as a percentage of resources deployed; 2) as a fixed cost; 3) adjust after optimization run. There is a wide variance across the agencies relative to non-producer costs. What is the standard method for calculating these costs?	See Use Case FPA01-06	Open
3.	Critical	What will we use for the standard configuration of fire resources beyond the NWCG minimum? For example, the NWCG standard is two crew for a type 6 engine and the agencies use three crew for a type 6 engine.		Open
4.	Non-critical	FPA would benefit from the creation and implementation of a federal Wildland Fire Report that uses a core set of standard data elements and structure. Format can differ.	A group is working on this already and will give the results to NWCG.	Open
5.	Non-critical	Will OMB have access to the national database? If so, how will they use it?		Open
6.	Non-Critical	FPA Core Team recommends the functionality of Fire Family Plus and PCHA be combined into one application for use by FPA system.	Recommendation will be made to the Committee. An informal proposal must be developed.	Open

No.	**Priority**	**FFALC Budget Committee Question**	**Resolution**	**Status**
7.	Non-Critical	How will the appropriations be allocated across and within agencies? The assumption is the SuD will be used to help define allocations.		Open
8.	Critical	Should we include the BAER costs in suppression costs? Same for ESR costs.	Yes. See Use Case FPA01-04	Closed
9.	Critical	The model will estimate a preparedness budget and a suppression budget. Is the suppression budget part of preparedness?	No.	Closed